

Amendments to the Claims:

This listing of claims will replace all prior versions of claims in the application.

1. (Previously Presented) A method for cleaning a single workpiece, comprising:

placing the single workpiece into a chamber;

heating a liquid;

spinning the workpiece;

forming a layer of the heated liquid on the workpiece;

controlling the thickness of the heated liquid layer;

providing ozone into the environment around the workpiece with ozone diffusing through the layer of liquid and chemically reacting at the surface of the workpiece, to clean the workpiece.

2. (Original) The method of claim 1 wherein the layer of liquid is formed by spraying the heated liquid onto the workpiece and by spinning the workpiece.

3. (Cancelled)

4. (Cancelled)

5. (Original) The method of claim 1 further including the step of placing the workpiece into a process chamber and heating the process chamber, to indirectly heat the workpiece.

6. (Original) The method of claim 1 wherein the layer of liquid is formed on a down facing surface of the workpiece.

7. (Original) The method of claim 1 wherein the layer of liquid is formed on an up facing surface of the workpiece.

8. (Original) The method of claim 1 further including the step of controlling the thickness of the layer of liquid on the workpiece by controlling a flow rate of liquid applied onto the workpiece.

9. (Original) The method of claim 1 further including the step of placing the workpiece into a chamber and providing the ozone by injecting ozone gas into liquid and then delivering the liquid into the chamber.

10. (Original) The method of claim 1 further including the step of placing the workpiece into a chamber, and providing the ozone by supplying ozone gas into the chamber.

11. (Original) The method of claim 2 further including the step of rotating the workpiece about a vertical axis.

12-13. (Cancelled)

14. (Original) The method of claim 1 further including the step of forming the liquid layer by pulsed spraying.

15. (Original) The method of claim 1 further including the step of forming the liquid layer by spraying.

16-21. (Cancelled)

22. (Previously Presented) A method comprising:

placing a single workpiece into a process chamber;

closing the chamber;

heating a liquid;

spinning the workpiece;

spraying the spinning workpiece with the heated liquid, with the heated liquid forming a layer on the workpiece;

controlling the thickness of the heated liquid layer;

providing ozone gas into the process chamber, with the ozone gas dissolved into the liquid, or injected into the liquid, causing portions of the ozone gas to dissolve into the liquid, and other portions of the ozone gas to be entrained into the liquid, and with the ozone gas chemically reacting with a contaminant on the workpiece, to clean the workpiece.

23. (Previously Presented) The method of claim 1 further including pulse spraying liquid onto the workpiece.

24. (Previously Presented) The method of claim 1 further comprising sealing the chamber.

25. (Previously Presented) The method of claim 1 wherein the liquid comprises de-ionized water and an acid.

26. (Previously Presented) A method comprising:

placing a single workpiece into a process chamber;

closing the chamber;

spinning the workpiece;

directing steam onto the spinning workpiece;

forming a layer of heated liquid on the workpiece; and

providing ozone gas into the process chamber, with the ozone gas chemically reacting to clean the workpiece.

27. (New) A method for cleaning a single workpiece, comprising:

placing the single workpiece into a chamber;  
heating a liquid including de-ionized water;  
spinning the single workpiece within the chamber;  
forming a boundary layer of the heated liquid on the workpiece;  
controlling the thickness of the heated liquid boundary layer on the  
single workpiece; and  
providing ozone into the environment around the single workpiece with  
ozone diffusing through the boundary layer of liquid and chemically reacting at a  
surface of the single workpiece, to clean the workpiece.